The NICHD Connection

May 2021

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DIPHR Study Associates Dietary Patterns During Early Pregnancy with Newborn Outcomes

By Shana R. Spindler, PhD

Pregnant women who followed heart-healthy diets, such as ones resembling the Mediterranean diet, early in pregnancy tended to give birth to larger newborns. This finding was highlighted in an NICHD Division of Intramural Population Health Research (DIPHR) study using data from the NICHD Fetal Growth Studies - Singletons. Led by postdoctoral fellow Dr. Samrawit Yisahak, the analysis examined the relationship between newborn outcomes, including birthweight, limb length, and head size, with measures of early pregnancy dietary patterns in a racially diverse group of 1,948 women. The findings, **published** in the American Journal of Clinical Nutrition, offer insight into which dietary measures assessed in pregnant women may be related to newborn health outcomes.



Samrawit Yisahak, PhD

"Numerous diet quality measures are known to be linked to heart health, but how these dietary patterns in pregnancy may relate to newborn health has not been well studied in large, multiethnic groups of women," said Dr. Yisahak. Along with her DIPHR colleagues, Dr. Yisahak set out to determine if several well-established diet quality measures influence newborn health outcomes, such as birthweight, body measurements, and preterm birth.

The researchers measured dietary patterns in pregnant women at eight to 13 weeks of gestation using a food frequency questionnaire that covered the previous three months. Each woman was assigned a score for three diet quality measures: Alternative Healthy Eating Index-2010 (AHEI-2010), alternate Mediterranean diet score (aMed), and Dietary Approaches to Hypertension (DASH). In general, better scores reflected intake of fruits, vegetables, whole grains, nuts and legumes, fish, and healthy fats. Lower scores stemmed from intake of red and processed meats, trans fats, sodium, and sugar-sweetened

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Letter from the Editor

What is your *why*? This is a question that Dr. Triesta Fowler, Director of Communications and Outreach in the NICHD Office of Education, asks fellows often. Dr. Fowler emphasizes the importance of knowing your reason for choosing specific career goals. Intention matters.

The idea of self-awareness and reflection are so important that we are making it the theme of this issue. For our **feature article**, we present recently published research from postdoctoral fellow Dr. Samrawit Yisahak on diet patterns during early pregnancy. In my interview with Dr. Yisahak, she explained that she entered the field of nutritional epidemiology because the translation of such research has implications for disease prevention. Indeed, she has found that specific dietary measures during early pregnancy correlate with newborn health outcomes.

The theme of knowing your "why" was front and center during our last "Meet the Physician" panel. In this month's <u>Clinical Corner column</u>, we share excerpts from the meeting—highlighting stories about life decisions. This is a not-to-be missed group of women! Also not-to-be-missed: our <u>Deconstructing Bias column on microaggression</u>, this month's <u>Rep Report</u>, and our <u>May announcements</u> and <u>events</u>.

On a personal note, I want to take a moment to say a **fond farewell to Dr. Constantine Stratakis**, former NICHD Scientific Director, as he makes a career transition back to Greece. For fellows who are new to the institute, Dr. Stratakis was the Scientific Director who supported the creation of this newsletter over ten years ago. He leaves behind his parting words on what drives him as a physician scientist and offers thanks to his former trainees, plus a few words of life advice. Thank you, Dr. Stratakis, for your mentorship and dedication to trainees.

Your Editor in Chief, Shana R. Spindler, PhD

Please send questions, comments, and ideas to our editor at shana.spindler@nih.gov.



DIPHR Study Associates Dietary Patterns During Early Pregnancy with Newborn Outcomes

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beverages. The researchers also used a common statistical technique, principal component analysis, to derive patterns of food consumption from the questionnaire responses, using My Pyramid Equivalent Database (MPED) food groups.

The primary findings show that better scores for AHEI-2010, aMed, and DASH diet quality measures in early pregnancy are associated with delivering larger newborns, as measured by the standard indicators of birthweight, length, upper arm length, skinfold thickness, and head size. Dietary patterns derived using questionnaire data and MPED serving units did not correlate with newborn outcomes.

"While we found that the three diet quality measures, especially aMed, are associated with beneficial outcomes such as reduced risk of low birthweight, there is also some evidence that they are associated with delivering larger newborns," cautioned Dr. Yisahak. "A critical area of future research should be identifying the ideal diet pattern that is associated with optimal fetal growth."

Dr. Yisahak emphasized that suboptimal diet is an important modifiable risk factor for many health outcomes across the lifespan. "Identifying and validating diet patterns for optimal fetal growth can help inform nutrition counseling during prenatal care and can also be used to evaluate programs and policies related to maternal and child health," said Dr. Yisahak.



REFERENCE

Yisahak SF, Mumford SL, Grewal J, Li M, Zhang C, Grantz KL, Hinkle SN. (2021). "Maternal Diet Patterns During Early Pregnancy in Relation to Neonatal Outcomes." *Am J Clin Nutr* 00:1-10.



Farewell Words from Dr. Constantine Stratakis

We offer Dr. Constantine Stratakis, former NICHD Scientific Director, best wishes moving forward as he continues his work as the (founding) Executive Director of a new research institute dedicated to personalized medicine in Athens, Greece. Dr. Stratakis has trained more than 200 students, residents, predoctoral, postdoctoral and clinical fellows, and has been an outspoken proponent for strong mentorship within the intramural program.

Dr. Stratakis continues his dedication to mentorship by assembling several departing thoughts that might be useful to NICHD trainees:



Hand drawn sketch of Dr. Stratakis by Dr. Elena Belyavskaya, physician and clinical research coordinator in the Stratakis lab

I will use two of my most favorite quotes, the first given to me by Dr. J. Aidan Carney—my friend and collaborator, but truly also my mentor and a physician par excellence. In his Mayo Clinic office, he had a poster with the quote "Discovery consists in seeing what everyone else has seen and thinking what no one else has thought," by Dr. Albert Szent-Gyorgyi (1937 Nobel Prize for Medicine). Dr. Carney gave this poster to me when he retired from the clinic, and I displayed it proudly in my NIH laboratory office. The other is from Dr. Albert Einstein: "The most beautiful thing we can experience is the mysterious. It is the source of all true art and science. He to whom this emotion is a stranger, who can no longer pause to wonder and stand rapt in awe, is as good as dead: his eyes are closed," translated from Einstein's book *Mein Weltbild* (1934)¹.

In other words, curiosity, imagination, and drive are the jet engines that move forward any scientist and were my engines, too. Throughout my life, I have been driven by the observations I made "where others did not see anything," and my creativity and energy are driven by the fascination of the "mysterious."

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Farewell Words from Dr. Constantine Stratakis (continued from page 4)

The other important point during these formative years has been the networking that is needed for anybody's career: the friends I made early on are still the most important contributors to my work today; or if not the same, their friends and former trainees are.

It is also clear that, like anyone in academics, I owe a lot to my trainees: I have had the fortune of having, over the years, wonderful people that have worked with me. All continue to be friends or collaborators and I enjoy tremendously seeing them with their families at meetings and other functions, thriving now as independent researchers themselves. It is my way of paying back the huge debt I owe to the many people that helped, encouraged, and taught me to give to my graduate and medical students, fellows, and all others that I work with, all I can give: my time, advice, guidance, and opportunities.

Finally, it is important to remember that a balanced life is everything. My parents taught me, among so many other things, this need for balance, early on, and introduced me to all that I like and do today; my wife and my kids (that keep supporting my long hours at work and my travelling), my many friends, the arts, sports, the outdoors, and other hobbies (such as collecting, making, and... drinking wine) nurture the mind, body, and my science.

REFERENCE

¹Einstein, Albert. (1934). *Mein Weltbild*. Ed. Carl Seelig. Zurich: Europa Verlag, 2005.



Constantine Stratakis, MD,

D(med)Sci

Deconstructing Bias: Microaggression

By Triesta Fowler, MD

"Aggressive" is defined as combative readiness, obtrusive energy, or a driving forceful energy. Most people can recognize and know how to deal with aggressive behavior from others. Similarly, people usually can tell when they are being aggressive with others. This is because aggressive behavior stands out and is "obtrusive" or "forceful."

Microaggressions can be subtle and may be unconscious or unintentional. They originate from stereotypes toward any group, particularly culturally marginalized groups. When microaggressions are communicated, they repeat and affirm stereotypes. The reinforcement of stereotypes minimizes the fact that they promote the existence of discrimination or bias.



Derald Wing Sue, PhD, first proposed a classification of racial microaggressions in a 2007 article from the *American Psychologist* (Vol. 62, No. 4). Dr. Sue categorizes microaggressions into three types: microassaults, which are conscious and intentional actions or slurs; microinsults, verbal and nonverbal communications that can communicate rudeness and insensitivity in a subtle way but demean a person's racial heritage or identity; and microinvalidations, communications that are usually unconscious and do not take into account or negate the thoughts, feelings, or experiences of a minority group.

Even if microaggressions are unintentional or unconscious, they are still offensive. They communicate hostile, derogatory, or negative messages to individuals who are a part of a targeted group. However, they are often missed as an area to be addressed because they may not fall in the category of more well-known overt and deliberate acts of racism. In fact, most people are unaware that they are doing it and how it affects others.

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Deconstructing Bias: Microaggression

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Microaggressions challenge us to give careful thought about what we say or do and how our words or actions may be based on stereotypes—understanding that those words and actions can hurt others even if they don't speak up and bring it to our attention. This may require careful examination of ideas and thoughts that may have existed within us for a long time.

If it is difficult to determine if you have used microaggressions, learn more about them by exploring the examples below and those illustrated in the resources provided. This quote from Dr. Sue highlights the benefit of increasing awareness of microaggressions: "My hope is to make the invisible visible," he says. "Microaggressions hold their power because they are invisible, and therefore they don't allow us to see that our actions and attitudes may be discriminatory."

Here are some examples of microaggression:

- » Deliberately serving a white person before a person of color in a restaurant (microassault)
- » Asking a colleague of color how she got her job and implying that she may have landed it through an affirmative action or quota system (microinsult)
- » Asking Asian-Americans where they were born or an African-American person how they got into an Ivy League university (microinvalidation)



RESOURCES

Sue, D.W., Capodilupo, C.M., Torino, G.C., Bucceri, J.M., Holder, A.M.B., Nadal, K.L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *American Psychologist*, 62(4), 271–286. https://doi.org/10.1037/0003-066X.62.4.271.

DeAngelis, T. (2009, February). Unmasking 'racial micro aggressions'. *Monitor on Psychology*, 40(2). http://www.apa.org/monitor/2009/02/microaggression.

Diversity in the Classroom, UCLA Diversity & Faculty Development, 2014 (PDF)

Slaughter-Acey JC, Sealy-Jefferson S, Helmkamp L, Caldwell CH, Osypuk TL, Platt RW, Straughen JK, Dailey-Okezie RK, Abeysekara P, Misra DP. <u>Racism in the form of micro aggressions and the risk of preterm birth among black women.</u> Ann Epidemiol. 2016 Jan;26(1):7–13.e1.

Torres MB, Salles A, Cochran A. <u>Recognizing and Reacting to Microaggressions in Medicine</u> and Surgery. *JAMA Surg.* 2019 Sep 1;154(9):868–872.

Overland MK, Zumsteg JM, Lindo EG, Sholas MG, Montenegro RE, Campelia GD, Mukherjee D. <u>Microaggressions in Clinical Training and Practice</u>. *PM R*. 2019 Sep;11(9):1004–1012.

Ro K, Villarreal J. <u>Microaggression in Academia: Consequences and Considerations.</u> *Nurs Educ Perspect.* 2021 Mar-Apr 01;42(2):120–121.



I wanted to make an impact on children before they became adults. Not only am I influencing the child, I'm influencing the parents. My decision to become a pediatrician was looking at my influence. How many people can I influence from that one visit? It's the impact that I have not only with that child, but their community...the thought of that long-term relationship I can have with that child and the family... I was already an attending physician, but I had a patient I had been seeing for eight or nine years, and he was living in southeast DC and not going anywhere with his life. He always said the right things to me: 'I want to do xyz.' Two weeks after my last visit with him, he was shot and killed. His vitals were great, but he died a premature death because of the illness of the community in which he lived. Sometimes you don't learn your why until you're knee deep into it. I knew I wanted to have an impact on the children and their families...



Rhonique Shields, MD, MHA, **FAAP**

Never forget the why. If you move away from the why, you're moving in the wrong direction, and then you need to reassess.

—Dr. Rhonique Shields, Vice President of Medical Affairs and Practice Operations, Holy Cross Health Network

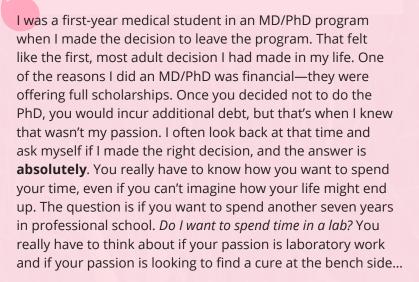
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Clinical Corner: Know Your Why

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It's really important to think about that [in response to a question about how to balance work with raising children]. The reality is that we are often not thinking about that early on. You need to develop the balance that keeps you healthy whether or not you have kids. It's not just about kids, it's about you. I schedule me first, because if I'm not okay and balanced with me, then I am nobody to anybody. Let's just be frank: women are most likely the ones to leave the medical profession because they cannot balance it. How do I establish those things that make me *me*? What is it that you love to do that keeps you *you*? You need to make sure you take the time to figure out the things that replenish you. Whether or not you ever have kids or a partner, you figure out what makes '[insert your name]' whole, and you commit to that on your calendar, and you don't compromise that!

—**Dr. Allison Agwu**, Associate Professor of Adult and Pediatric Infectious Diseases, Johns Hopkins University School of Medicine





Allison Agwu, MD, ScM





Sandra E. Moore, MD

You have to go with your gut. Where do I enjoy being, literally, from day to day? If you do not enjoy the path you choose, you may find yourself exiting medicine altogether. Choose wisely and make sure you're happy...

Focus on the now and being your best in the now, and that will get you to the next step.

—Dr. Sandra E. Moore, Designated Institutional Official, Navicent Health in Macon, Georgia



By Lauren Walling, PhD

As the current NICHD Basic Sciences Institutes and Centers (IC) Representative, I represent NICHD postdoctoral fellows at the Fellows Committee (FelCom) meeting every month and share the latest news with you here. Do you have a concern or question that you want brought up at the next meeting? Contact me at lauren.walling@nih.gov!



The **Visiting Fellows Committee** is looking for new members to join their social subcommittee. Please contact Vrushali Agashe (**vrushali.agashe@nih.gov**) or Zeni Wu (**zeni.wu@nih.gov**) if you are interested!

There is an outreach opportunity organized by the National Cancer Institute's **Center for Cancer Research Fellows and Young Investigators (CCR-FYI)** with the "Learning Undefeated" program. This program creates mentorship opportunities among high school, college, and professional women. They are looking for female scientists interested in assisting with laboratory programming and answering questions during their virtual events. Events take place on Saturdays from 9–11 a.m., April through July. If you're interested, contact Samira Brooks (**brookssa@nih.gov**).

The **Graduate Student Council** invites you to join a new seminar series starting April 16, 2021, the Virtual Clinical Case Conference, hosted by the <u>International Biomedical Research Alliance</u>. These seminars will discuss elements of dual-degree physician-scientist training pathways, such as MD/PhD programs.

May Announcements

MENTOR OF THE YEAR AWARDS: ACCEPTING NOMINATIONS NOW! Do you have an outstanding mentor?

The time has come for you to nominate your fellow or PI for the **2021 NICHD Mentor of the Year Awards**. This is your chance to recognize an individual in the Division of Intramural Research (DIR) or Division of Intramural Population Health Research (DIPHR) whose mentoring has made a difference in your life at the NIH!

Below is the link to obtain information about the NICHD's two annual intramural Mentor of the Year Awards, one for a *fellow* and one for an *investigator*. Please submit your nomination form and a 500-word (maximum) narrative electronically to Dr. Erin Walsh (erin.walsh@nih.gov).

The submission deadline is Friday, June 25, 2021.

Please contact the Office of Education if you have any questions about the nomination instructions or selection process. Information available at <u>Mentor of the Year Awards</u>.



JAPAN SOCIETY FOR PROMOTION OF SCIENCE ACCEPTING APPLICATIONS FOR NIH INTRAMURAL FELLOWSHIP

This NIH Intramural Fellowship was created in 1995 to promote bilateral cooperation between NIH and the JSPS Foundation. This partnership-based program is primarily funded by the JSPS Foundation with co-funding from the NIH host institute or center. JSPS is the largest government-supported foundation in Japan that provides fellowships to Japanese scientists.

The NIH-JSPS Intramural Fellowship provides a two-year stipend to Japanese postdocs to work at NIH intramural labs. This fellowship is awarded to about 10 postdocs annually. For more information about the fellowship and application documents, please visit https://jspsusa.org/wp/fellowship/kaitoku-nih. The application due date is 5:00 p.m. on Friday, May 28.

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May Announcements

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VIRTUAL GRANT WRITING SESSION FOR IRF APPLICANTS Monday, June 7, 2–4 PM Led by Triesta Fowler, MD

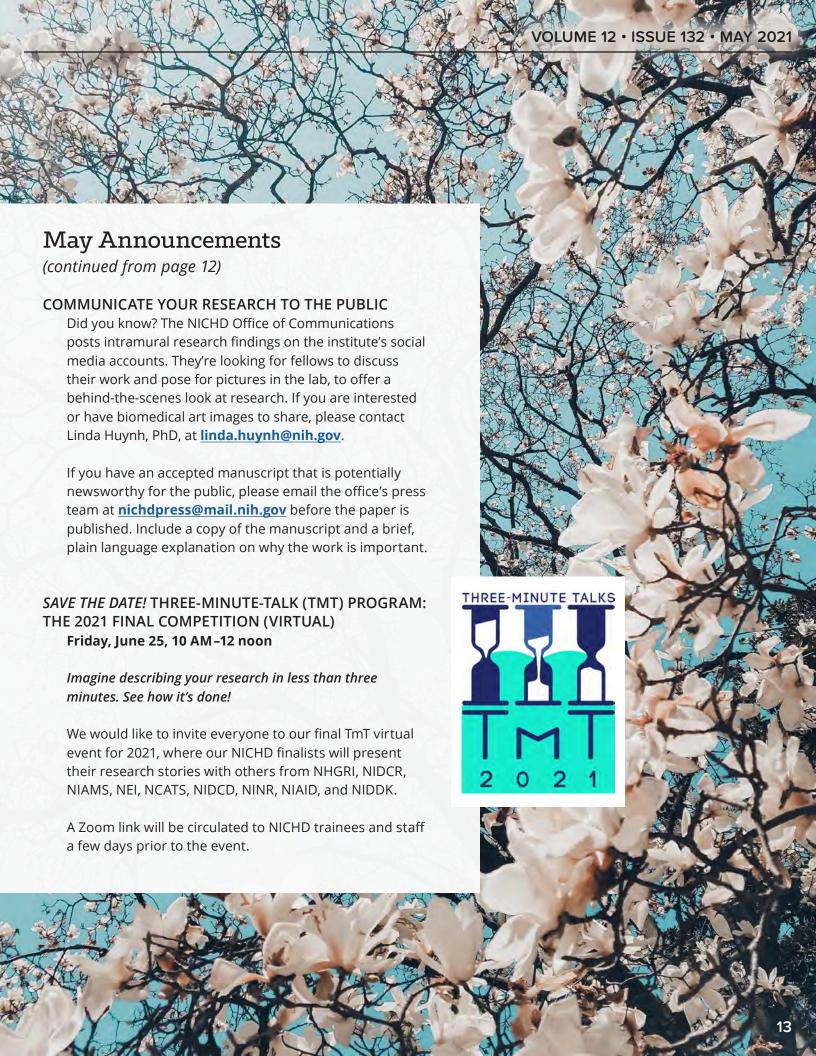
In 2018, DIR launched the Intramural Research Fellowship (IRF), a competitive research funding opportunity for NICHD postdoctoral, visiting, and clinical fellows. Its main objective is to promote grant writing among our intramural trainees, while enhancing awareness of the various components of an NIH grant application. For all prospective applicants, the Office of Education will offer a training session to cover various components of an NIH grant, details about the application and review processes, and tips on preparing an IRF application.

Attendance at this virtual training session is a requirement for submission. For more information on the IRF, please visit NICHD Intramural Research Fellowship. The IRF submission date is Wednesday, September 8, 2021.

Please email Ms. Veronica Harker (<u>veronica.harker@nih.gov</u>) if you are planning to attend the training session.

As a new requirement for this cycle, in order to apply for this award, you must also submit a brief statement of intent to Dr. Triesta Fowler (fowlerlt@mail.nih.gov) by Friday, June 4th (copying your NICHD mentor to confirm their support). This statement should be submitted as a pdf document and should provide a brief summary (½–1 page maximum) of your IRF research proposal and a running title for the application. Please note that the details of your proposal do not need to be solidified for this statement of intent—rather, this should be a brief introduction and summary of the project you are planning.

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May Events

THURSDAY, MAY 13, 1-2 PM

Virtual Seminar: "From Postdoc to Faculty: Successful Transitions to Academia"

Dr. Paula Gregory, Associate Dean for Faculty & Educational Development in the Graduate School of Biomedical Sciences at the University of North Texas

Are you thinking about a career in academia? Often postdocs spend time crafting their future research program, but they are not introduced to important steps necessary for the successful transition to academia. Come learn these basics about navigating the academic job search process and important academic interviewing skills. Discover ways to prepare for success in academia once there (grants, mentoring and collaborations) and tips to avoid burnout.

Please email Ms. Brittney Corum (**brittney.corum@nih.gov**) if you are planning to join.

FRIDAY, MAY 14, 9—11 AM

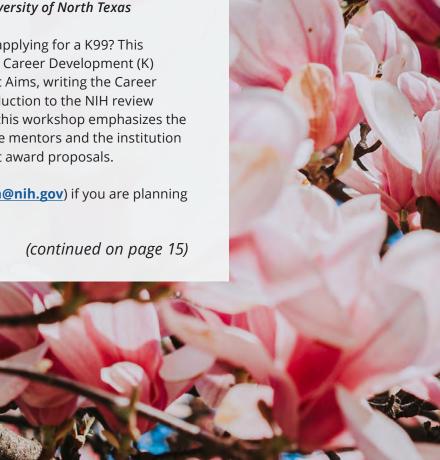
Virtual Seminar: "K99 Awards for Clinical Fellows" (for Clinical Fellows Only)

Dr. Paula Gregory, Associate Dean for Faculty & Educational Development in the

Graduate School of Biomedical Sciences at the University of North Texas

Are you a clinical fellow interested in writing and applying for a K99? This workshop will cover critical aspects of writing NIH Career Development (K) grants, including writing clear and concise Specific Aims, writing the Career Development and Training sections, and an introduction to the NIH review process and how grants are scored. Importantly, this workshop emphasizes the necessary partnership between the candidate, the mentors and the institution and its vital role in successful career development award proposals.

Please email Ms. Brittney Corum (**brittney.corum@nih.gov**) if you are planning to join.



May Events

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TUESDAY, MAY 25, ALL DAY

The 16th Annual Meeting for Postdoctoral, Clinical, and Visiting Fellows, Graduate Students, and Postbacs (Virtual Event)

This meeting will allow you to step away from the lab for a day to network with your NICHD colleagues, participate in a career exploration session, and learn more about the recent developments in our intramural research programs.

This year's retreat will include:

- » Keynote presentation by **Dr. John F. Tisdale**, Senior Investigator at the National Heart, Lung and Blood Institute, Cellular and Molecular Therapeutics Branch.
- » Afternoon keynote presentation on mentoring by **Dr. Gisela Storz**, NICHD-NIH Distinguished Investigator, Section on Environmental Gene Regulation.
- » Career breakout sessions with professionals from academe, industry, teaching, government administration, science communications, science policy, and grants management.
- » You can be a highlight at the retreat too! You can present you work during the virtual poster sessions, and six fellows will be selected to give a talk from their submitted abstracts.

Please register by Friday, May 14, at:

https://2021nichdfellowsretreat.conferencecontent.net.

ONGOING EVENTS AROUND CAMPUS

NIH-Wide Office of Intramural Training and Education (OITE) EventsFor more information and registration, please visit **Upcoming OITE Events**.

NIH Library Training and Events

For more information and registration, please visit the **NIH Library Calendar**.

